

REMARKS

Claims 1-9, 10, 11 and 25-34 are pending in the application. Claim 1 has been amended. Claims 4, 9 and 11 through 24 have been canceled.

No new matter has been added by the present amendments. Support for the amendment to claim 1 may be found in now-canceled claim 4.

CLAIM REJECTIONS

Rejection of claims under 35 U.S.C. § 112, first paragraph

Claims 1-8, 10, 11 and 25-34 remain rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with the written description requirement.

The rejection has been maintained on the grounds that the specification allegedly does not provide a description of what makes a construct have “essentially no ability” to cross the blood brain barrier, and thus one of skill cannot immediately envision which constructs would and would not cross the barrier.

The specification does provide support for the structures of a wide variety of constructs and also provides support for at least one assay to determine whether a given antisense-based construct crosses the blood brain barrier (see Example 7). Example 6 notes that intake and retention of the constructs in tissues is related to the antisense rather than the sense properties of the construct. Claim 1 has been amended to require that the oligonucleotide be an antisense or antisense analog (as originally required by now-canceled dependent claim 4).

Thus, a correlation or relationship between the structure of the claimed constructs and their function is provided in the specification, and Applicants urge that written description requirement has been met. Accordingly, Applicants respectfully request the withdrawal of the rejection for lack of written description.

Rejection of claims under 35 U.S.C. § 102

Claims 1, 4, 5, 8, 10, 11, 25-28, 30-32 and 34 remain rejected under 35 U.S.C. § 102(b) over Kuijpers et al. (EP 0 490 434) and claims 1-3 and 5-7 remain rejected under 35 U.S.C. § 102(e) over Kayyem et al. (U.S. 6,232,295).

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added).

Both Kuijpers et al. and Kayyem et al. are silent with regard to the ability of the disclosed constructs to cross the blood/brain barrier. The Examiner points to the Moffett et al. and Opalinska et al. references as allegedly demonstrating that Kuijpers et al. and Kayyem et al. provide a disclosure that such features are not explicitly stated but are inherently present. Neither Moffett et al. nor Opalinska et al. provide any evidence that constructs as disclosed in Kuijpers et al. and Kayyem et al. cross the blood brain barrier (indeed, Moffet et al. do not even mention antisense-based constructs). Further, as Examiner points out in the Office Action at page 2, “not crossing the blood brain barrier is not an inherent feature of all therapeutic molecules.” The Examiner has not pointed to any evidence that such properties are inherent in the constructs Kuijpers et al. and Kayyem et al. Applicants respectfully request the withdrawal of the rejection over Kuijpers et al. (EP 0 490 434) and Kayyem et al. (U.S. 6,232,295).

Rejection of claims under 35 U.S.C. § 103(a) over primary reference Kuijpers et al.

Claims 1, 4, 5, 8, 10, 11 and 25-34 remain rejected under 35 U.S.C. § 103(a) as obvious over Kuijpers et al. (EP 0 490 434) and further in view of Gewirtz et al. (U.S. 5,098,890) and Low et al. (U.S. 5,994,320).

Applicants maintain that the Examiner has not made a *prima facie* case of obviousness. Kuijpers et al. is silent with regard to the ability of the disclosed constructs to cross the blood/brain barrier. Gerwitz et al. and Low et al. do not teach or suggest that the constructs disclosed in Kuijpers et al. do not cross the blood/brain barrier. Accordingly, the combination does not teach or suggest each and every element of the claims, and the Examiner has not established a *prima facie* case of obviousness using these references.

Applicants respectfully request reconsideration and withdrawal of the rejection for obviousness.

CONCLUSION

For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the pending rejections. Applicants believe that the claims now pending are in condition for allowance, and notification of such is respectfully requested.

If, for any reason, a telephonic conference with the Applicants would be helpful in expediting prosecution of the instant application, the Examiner is invited to call Applicants' Agent at the telephone number provided below.

Respectfully submitted,
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